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THE CLASSIFICATION OF THE STATISTICAL EMPLOYEES
OF THE UNITED STATES GOVERNMENT
AT WASHINGTON

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The nature of any classification must depend on the purposes to be achieved through its use, and accordingly in discussing the work of the Congressional Joint Commission on Reclassification of Salaries in respect to the statistical employees of the government at Washington, it is desirable to begin with a statement of what the commission sought to accomplish, in so far as one may justly attempt to formulate purposes of a commission.

The immediate object of the commission can perhaps be best set forth by quoting a paragraph from the act of Congress creating it:

"It shall be the duty of the commission to investigate the rates of compensation paid to civilian employees by the municipal government and the various executive departments and other governmental establishments in the District of Columbia, except the Navy Yard and the Postal Service, and report by bill or otherwise, as soon as practicable, what reclassification and readjustment of compensation should be made so as to provide uniform and equitable pay for the same character of employment throughout the District of Columbia in the services enumerated."

Persons familiar with the government service will at once appreciate that such an authorization from Congress permitted of two courses. The commission might submit a report that would permit of a temporary realignment of salaries without attempting to correct those forces which have produced the existing evil conditions. On the other hand, it might recognize the dynamic nature of the problem of handling a force of over 100,000 employees engaged in hundreds of diverse under-

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takings; and it might attempt to devise a continuing mechanism to preserve a permanent, uniform and equitable alignment in salaries and to correct those forces that have caused conditions of employment in the government service to become notorious. It could have given a narcotic to remove the symptoms, or it could have attempted to map out a régime of right living that would ultimately eradicate the causes.

The commission never hesitated in its choice. Whatever criticism may be leveled at the commission's work, it can never be fairly said that the commissioners did not broadly interpret their responsibilities, that they did not welcome suggestions and advice from every person who thought he had something to contribute to the success of the undertaking, or that they sought to save themselves work. Broad interpretation of their responsibilities, democracy in organization and management, a willingness to listen, though undoubtedly with more than two members, figuratively, from Missouri, and a tendency to be constantly on the job, were the dominating characteristics of the commissioners. They sought to achieve a broad fundamental reform in the methods of employment management in the civil service.

This fundamental decision necessarily exerted a profound influence on the classification they developed. Had the commissioners taken the narrow view or sought to avoid work, they could easily have established a comparatively small number of salary grades and assigned each position to one of these grades. In other words, they could have duplicated the classification processes that were applied about the middle of the last century. They might have gone a little further than that and have attempted to write out for each salary grade a statement of the duties and responsibilities which would justify placing an employee in this grade. Such definitions would have been of the blunderbuss variety and would have lumped together employees doing things which were very unlike, but which were believed to be of equal value to the government. This course would have had the great merit of apparent simplicity, but it would have been of comparatively little aid in achieving the fundamental reforms that the commission determined were necessary.

To make a complete enumeration of all the detailed objects to be secured through the application of the classification is doubtless beyond the power of any one observer, but some of the more important ones can be discussed.

For the purposes of recruiting suitable employees for the service, it has long been felt that more specific tests of qualifications could be given. To give specific tests of a candidate's qualifications for a particular craft or line of work, it is first necessary to know what qualifi-

cations a person must possess to perform those duties satisfactorily. That is almost painfully obvious, and, of course, the Civil Service Commission has known it; but it has not had the funds and equipment to make a study of the entrance qualifications necessary for the individual positions or to give more minute examinations designed specifically to test for those qualifications. It has given for many positions broad, general examinations, testing an employee's general education and ability; but it has not found whether the employee has the ability, knack, or inclination that leads to success in the particular job. The Reclassification Commission designed a form of classification that would ultimately lead to the formulation of a statement of the specific requirements for the particular jobs. It made a preliminary statement of the required entrance qualifications, a mere beginning. Experience will modify and perfect these statements, but it was believed that a good classification of positions, to be of service for recruiting, must possess an analysis of the requisite qualifications.

Similarly, the commission sought to develop a classification that would be useful in regulating promotion. It made a vital distinction, not now generally recognized in the federal service, between an advance in salary not accompanied by any increase in duties or responsibilities, and a promotion, meaning a change to more difficult work or the assumption of greater responsibilities. How vital a matter this distinction is can hardly be appreciated by one who has not been in a government bureau with a "statutory roll," that is, with an appropriation which specifies the number of employees to be hired at each of the specified rates of pay. In such a bureau, no employee can secure increased compensation unless there is a vacancy to which he can be advanced. When the vacancy occurs, the administrator frequently is called upon to make a choice between the employee who merits an advance in pay on the basis of meritorious performance of unchanged duties and the employee who deserves promotion because of increased duties and responsibilities. He must choose, and as a result, through the continued application of such choices, it not unfrequently happens that almost all relationship between pay and duties is lost and longevity is the real factor that determines the position on the pay-roll.

This situation the commission desired to eliminate, and consequently it recommended a classification in which advancement in pay while performing a specified class of duties, involving specified responsibilities would be semi-automatic upon demonstrated efficiency and not contingent upon the existence of a vacancy. Such semi-automatic increases must necessarily be within reasonably narrow limits, and thus a fairly minute classification was essential.

Promotion in the federal service at Washington at the present time is virtually free from any centralized control or regulation. The Civil Service Commission intervenes, practically speaking, only in so far as it is necessary to preserve the integrity of its entrance examinations, by blocking the obvious device of getting a person into the service on a low grade examination and then promoting him to a higher position. Further than this it does not go, and the selection for promotion rests virtually in the hands of the appointing officer, subject only to such restrictions as may have been placed round him by Congress in its appropriations. In administering a statutory roll, he can promote or advance an employee only when he has a vacancy, and generally speaking he can have only such a number of employees and at such rates of pay as have been specifically authorized. In administering a lump sum roll, he can have as many employees at such rates as he desires, provided the aggregate expenditure does not exceed his appropriation and provided he does not exceed any maximum limitations that may be placed upon the appropriation in respect to the salaries to be paid. One man can promote or advance at will, the other finds his hands tied.

Selection for promotion, when one may be made, is not formally competitive. The Reclassification Commission sought to introduce in so far as possible the competitive element. Formal set promotion examinations of the traditional type are, of course, universally viewed with suspicion, but an impartial review of the records of the candidates by an outside examiner, supplemented by such practical tests as can be devised, is probably necessary to eliminate improper influences affecting promotion. The hope of the day for successful control over promotions is the record of efficiency and adaptability displayed in the daily performance of the duties of the job.

A very little work with efficiency records will convince one that the first step in their development is a fairly minute analysis of the duties of the job. Reliable statistics of productiveness and accuracy may be kept for the routine card punch operator, and one may get very good numerical data on a group of statistical clerks doing such simple tasks as straight copying and computing. As the higher groups of statistical clerks are reached, numerical records of efficiency break down and one has to depend on a general analysis of the product and the record. If any progress is to be made with the development of records of productiveness and the general value of employees as a means of determining those to be promoted and advanced, the classification of positions must be fairly minute on the basis of the craft being followed by the employee.

Another factor that influenced the commission toward the develop-

ment of a fairly minute classification upon the basis of the craft followed was the desire to promote the development of the employee. At present the problem of training and developing employees is very largely in the hands of the supervising officer in immediate charge of getting out the work, and frequently in a given office the number of employees following a given craft is so small that any formal training for them is out of the question. They get what the job gives. If these isolated employees are classified by craft and the figures for the craft are brought together, regardless of organization lines, the figures become impressive. Can an employer of 10,000 filing clerks, scattered through many organization units, safely afford to leave the training and development of filing clerks to the individual units? What are the possibilities for training statistical employees at Washington, with the total number in the different branches of the work in the neighborhood of 3,243, not counting the temporary employees of the census?

The commission was impressed with the possibility of opening careers for employees in the civil service. At present the horizon of the government employee generally lies within the confines of the bureau or office to which he is first appointed, and sometimes even within the division or section of that organization. He gets in training and development as much or as little as his bureau or office has to offer; and at times he is called upon to abandon one craft he has learned and pick up another, because the work of his unit has changed or because it offers no opportunity for higher work in the craft he has learned. That he has a talent, say, for statistical work, and that the government as a whole needs employees qualified for that work, is not the vital question. Does his office need it? If not, then he must do something else or fight the system. The present system actually opposes movement from one department to another, and he who would change must have knowledge of other organizations, perseverance, and a pleasing personality or else "influence" that will win him consideration where he wishes to go, and then if he has served his three years in the department or independent establishment to which he was first appointed, he may be transferred.

The modern conception that people must be tried out a bit, so that each peg may ultimately find an appropriate hole, is absolutely contrary to the government practice. The new man works in the office to which he is assigned, and if he is a misfit—well, he is a misfit. Private organizations pursuing this employment policy "fire" the misfits, which after all is far better for the misfits than the government practice of keeping them. After a man has been a misfit around a government office for a few years, he is in the "dead wood" class. Presumably he

had some good in him when appointed, at least he was good enough to get by the civil service, and that is something; but being a misfit breaks his spirit, and by the time his three years are up his main interest is pay day, if it is not in cultivating a little congressional influence.

The commission believes thoroughly in eliminating persons who do not make good, but it believes first in giving them a real trial. For this reason, it recommends an employment policy which would tend to belittle organization lines. The Civil Service Commission would be required to follow the employees, and if they were not coming up to requirements, to make a diagnosis of the case and to replace them. The employee would be free to go to the commission if he were dissatisfied with his own situation, and to have its aid and assistance in working out his future. If he is statistically inclined and has absorbed all that the Indian Office has to offer in the way of possibilities of statistics, the commission can place him in the Census or in Labor Statistics or in any other office that needs that kind of work and is looking for persons who are anxious to do it. For work of this type, a classification by crafts is distinctly helpful.

The existing congressional opposition to transfers from one department to another is born of the absence of any standard salary rates. Not infrequently one department will pay an entrance salary as much as 50 per cent more than another for the same work. The eligible person passing a given civil service examination with the highest rating may be certified to a low paying department and may accept. A few months later a high paying department may call for a certification from the same register and get a candidate who just did pass. When the first employee discovers that another department is paying much more to others who are not so well qualified, he naturally would like to "transfer." Such a condition gave rise to the "transfer evil," and the administrators who were operating their offices on a low salary scale appealed to the congressional committees. Sometimes they used the situation as an argument for larger appropriations to enable them to meet the salaries paid by the other organizations, and at other times they merely complained against the raids that carried off their employees. The quick, direct solution was to limit transfers. If a standard salary scale were in use, this objection to transfer would be entirely eliminated.

In a cursory way this discussion has indicated some of the motives which led the commission to discard the proposal for the establishment of a few descriptive salary grades, and to develop instead a detailed classification with a division into crafts, and into classes within crafts according to the logical divisions into which crafts may be divided by

persons who are familiar with them, or who have made a detailed study of them.

The actual division into crafts and into classes within the crafts was made by the so-called "detailed" staff of the commission, men and women from the government offices selected because of their knowledge of the type of work with which they were to deal and their familiarity with the government service. They were under the leadership of a "headquarters staff" of industrial engineers experienced in personnel classification, the two principal members of which were Mr. E. O. Grifenhagen, chief counselor, and Mr. H. E. Fleming, director.

Perhaps it may not be improper to say that many of the members of the detailed staff entertained a profound hope of a possible result from the detailed specifications over which they labored so many months, examining hundreds of questionnaires, writing and revising specifications, conferring with their associates in the commission, in the departments and offices, and on the numerous advisory committees—wherever they could get enlightenment and assistance. They knew that the classification was not inseparable from budgetary reform, and they recognized the wisdom of the commission in not linking its fate to any particular budgetary legislation. The fact still remained that the item of "personal services" is one of the heaviest among government expenditures; and that although reclassification can proceed without a budget, a budget cannot get anywhere without going into the matter of salaries and salary standardization. The detailed employees were many of them practical administrators of no little experience, and collectively they knew the game. They entertained the hope that through reclassification, under a detailed, precise set of specifications, might come a better understanding between the executive establishment on the one hand and Congress on the other. They saw in this detailed book of job specifications the compromise method for appropriating for personal services, which would give to the administrators that freedom which comes from a "lump sum" appropriation while it preserved to Congress that element of control that is characteristic of a statutory appropriation.

Individual cases of abuses of lump sum appropriations in some of the war agencies, the payment of salaries out of all proportion to anything in the old establishments, made vivid the danger of uncontrolled lump sum appropriations. On the other hand, many knew from experience the difficulty of forecasting twenty-three months in advance the exact services which would be required for a bureau or division, as is necessary under a statutory roll. Frequently there are sufficient funds, but the money is so tied up that the responsible administrator is prevented

from achieving the best results. The possibility afforded by the detailed specifications was that the administrators could say to Congress: "Give us the money you think wise, control us in respect to the salaries we may pay through these detailed minute specifications which you may alter from time to time to keep us abreast of the changes in economic conditions, but leave us free to adjust our numbers and the exact disposition of our forces within these detailed specifications. Require us to estimate in advance according to the standard specifications and to report in detail in accordance with them, but give us a little freedom for adjustment." A broad set of descriptive salary grades would offer many possibilities for evasion. The detailed specifications as drafted would give to Congress a control over the actual expenditures for a given type of service that it has never yet achieved. It has in fact controlled the amount paid, but it has never determined the quality and quantity of the article purchased. This classification was designed to give to Congress detailed control over what it gets for the money spent for services.

Such are the broad objects of the classification, almost all demanding a scientific division into primary units or classes, as distinguished from a grouping of such true classes as are believed entitled to like salaries into non-homogeneous grades. Statisticians need hardly be reminded that given true classes, grouping into grades is simple enough, but to unscramble a non-homogeneous grade where the component classes are not shown necessitates doing much of the work over again.

The statistical positions in the classification are divided into three services: the statistical science service proper, the statistical clerical service, and the mechanical tabulation service.

In the statistical science service are placed those positions in which the employee is required to analyze economic, social, or related problems, to develop or to apply statistical methods in their solution or illumination, and to interpret the numerical data pertaining to the subject. A prerequisite for entrance into this service is a fairly broad familiarity with current economic and social problems and with the methods of research in these fields, which is, of course, now ordinarily secured through college and university training with some specialization in the social sciences. For the higher positions in this service, thorough knowledge of the special subject and practical experience are required, but all the positions have the common characteristic of requiring a sufficient background of knowledge and a sufficient familiarity with the methods of social research to enable the incumbent to make analyses, perhaps very elementary ones, and to interpret data in the social field, using the term "social" broadly.

The statistical clerical service includes those positions which require the supervision or performance of the clerical processes involved in the collection, tabulation, and interpretation of statistical data, exclusive of positions concerned entirely with the operation of the mechanical tabulating machines and the processes incidental thereto. The most common clerical processes involved are the collecting and examining of schedules and their preparation for tabulation, tabulation and computing, and the verifying of these processes. The upper classes in this service include the supervisory statistical clerical positions, and require successful experience in statistical clerical work and no little administrative ability, and in salary grade they outrank the lower positions in the statistical science service. They are distinguishable from the positions in the statistical science service in that they do not involve the determination of the nature and scope of the inquiry, its scientific content, or the interpretation of the results. If these duties are involved, the position goes into the statistical science service, even if the duties of the position include the supervision or the actual performance of some statistical clerical processes. The basic educational qualifications for first entrance into the statistical clerical service are: "Training equivalent to that represented by graduation from high school or from a commercial school of recognized standing, neatness in preparing papers, legible penmanship, and rapidity and accuracy in arithmetic, writing and figure copying." With these fundamental qualifications, a person may ordinarily be developed into a journeyman statistical clerk and, if possessed of administrative ability, may become qualified through experience for the highest statistical clerical positions.

The mechanical tabulation service includes those positions requiring the supervision or performance of work required in the mechanical tabulation processes, exclusively. "Exclusively" is used because if a statistical clerk incidentally operates mechanical tabulating machines as one of the parts of his general statistical clerical work, he is classed as a statistical clerk; and similarly, if a statistical scientist occasionally designs a punch card or a code, or runs a tabulator, or supervises a mechanical tabulation unit, he is still placed in the statistical science service. The highest classes in the mechanical tabulation service embrace the positions involving the supervision of important mechanical tabulation organizations, including the "laying out" of the work, the designing of cards and codes. In salary rank they may be on a par with the higher statistical clerical classes and they may be above several classes of the statistical science service. For entrance into the lower classes of this service, the educational qualification is a common school education.

"The line of normal advancement," one will at once observe, has been an important factor in influencing the classification. An intelligent person with only a common school education, entering the service as an operator of one of the mechanical tabulating machines, can from his or her office experience generally acquire the qualifications requisite for the higher positions in the service. Similarly, a person with an education equivalent to that gained in a high school can, by virtue of his or her experience alone, advance to the higher positions in the statistical clerical service. The employee in the mechanical tabulation service who has only a common school education, and the statistical clerk who has gone no further than the high school, according to this classification, are required, if they desire to go ahead along the less normal course of advancement, to supplement the development that they are getting in the every-day routine of the position by study and work that will make up for the qualifications which they lack.

The commissioners, it should be noted, were by no means sticklers for academic degrees. "Training equivalent to that represented by" was the standard phrase without which it was not permitted to specify even graduation from high school, not to mention college, and the bill submitted by the commission provided that:

"(d) Whenever the possession of a university or college degree or a high-school diploma, or the equivalent of such degree or diploma, is prescribed as a qualification for a class, the commission [to administer the act] shall prescribe as such equivalent a standard, or standards, based on experience or demonstrated ability in the performance of duties similar to those prescribed for such class, which will be accepted as such equivalent."

The intention of the commission was to be eminently practical in the matter, and the educational requirements such as graduation from a high school, or college, or three years graduate study, were used not as arbitrary requirements but as convenient, easily-expressed measuring sticks. If a statistical clerk who has been working for years with statistics of industry wished to qualify as a statistician in that field, he would be examined not in Greek, and Latin, and ancient history to discover whether he had the equivalent of a college education, but on his knowledge of the economics of industry and on his ability to plan the scope and content of inquiries, to analyze statistics and write reports. The absence of a college education would raise a rebuttable presumption against him which would necessitate his satisfying the Civil Service Commission that he had acquired the really requisite education and knowledge in his own way. If three years graduate study was mentioned as the measure, the candidate would be expected to show not only a good general knowledge of his subject, but such an ability to

make contributions to it as might have won him his doctor's degree if he had followed orthodox academic educational lines.

The commission was alive to the unique possibilities for the training and development of employees for technical and scientific positions that are inherent in the government service. Time did not permit the development of a detailed plan for supplementing the work of existing educational agencies in the District of Columbia, which are already rendering a noteworthy service in adapting their hours and to a limited extent their courses to meet the needs of the government employees, but the commission recognized the duty of formulating and executing such a plan as a necessary function of an effective administrative agency concerned with the employment problem of the United States government. The establishment in the government service of a deliberate system for the training of statisticians and statistical clerks would be a great step in advance. Many statisticians in private employment have acquired much of their preliminary training and experience in the public service, and they will appreciate the fact that with only a little deliberate thought and effort this experience might have been made far richer and broader. A governmental training system would, as a matter of fact, advance the profession as a whole and would benefit all users of statistics by raising the quality of the figures.

Administration was not recognized as a distinct craft. Positions involving administrative duties, as a rule, constitute or are included in the upper classes of that special service which differentiates and gives character to the administrative office being classified. Thus the position of director of the census constitutes a "one man" class in the Statistical Science Service and not a position in a Bureau Chief Service. In its classification, the commission takes the obvious position that a director of the census should be at once a statistician and an administrator, and, similarly, that senior statisticians directing large statistical undertakings should be both statisticians and administrators.

The commission, however, did not go on record as favoring the placing within the competitive classified civil service the positions of bureau chief and other similar offices that are now filled by the President, either with or without the consent of the Senate. Its bill specifically preserves the status quo established under the Civil Service Act of 1883. The provision recommended reads as follows:

"Provided further, That the President may make an appointment to a position excepted from the provisions of the Civil Service Act, or exempted from examination thereunder, without regard to the qualifications specified in the classification of 1920 or the provisions of this Act relating to appointments to a position, or such rules and regulations as may be adopted thereunder; but nothing herein contained shall prevent the President, as provided by the Civil Service Act, from including such position

within the provisions of such Act or from terminating the exemption from examination with respect to such position, and thereafter such position shall be subject to all the provisions of this Act."

Legally, therefore, its carefully drawn specifications for the high positions that are now outside the competitive classified service would have the value of waste paper. What their moral value may be remains to be seen. Conceivably, they might have a powerful influence on the President in making his nominations, and on the Senate in passing upon those nominations. Whenever Congress is ready to remove all non-political offices from politics, moreover, the classification is ready to meet the situation. Ardent champions of civil service reform will find in this feature of the commission's report its most outstanding departure from sound principles of personnel administration. The answer to their criticism will have to be found in political expediency, and it will have to be admitted that the object of opening up possibilities for successful careers in the public service found a limit in political expediency.

The higher classes in the statistical science service and to a lesser extent in the statistical clerical and the mechanical tabulation services, are what the commission terms "group classes" as distinguished from "true classes." They are groups of classes which have common characteristics in respect to general duties and responsibilities, but which differ from each other in respect to the subject matter involved. Under the group class title "Senior Statistician" one will find, as illustrative specific titles, "Senior Statistician (Population), Senior Statistician (Transportation), and Senior Statistician (Vital Statistics)," and in addition to the statement of common qualifications demanded, the added requirement, "For each class in the group, specialization in training and experience in the subject matter to be dealt with in the position concerned as indicated in the title of that class."

In the lower classes of the statistical services, the employees are to a very considerable extent interchangeable, and one with good statistical clerical ability is equally serviceable whether working on vital statistics or on statistics of foreign trade; and the recent college graduate with good fundamental training in the social services can perhaps do almost equally good work in any one of a number of different bureaus. As the employee continues to serve in a given bureau, he acquires a highly specialized knowledge of the subject matter with which his bureau deals. That is obviously the case with statisticians, for they must, to be successful, know both method and subject. In a lesser degree it is true of clerks. The high-class statistical clerk is sometimes distinguishable from his lower-class fellow worker mainly because of

his clerical knowledge of the subject matter or of the procedure. He may have a precise detailed knowledge of a complex classification that makes him almost invaluable, or he may know the routine procedure as no one else knows it. This knowledge is to be distinguished from that of the statistical scientist in that the clerical knowledge would not fit an employee to throw existing classifications and procedures into the discard, and to develop new ones that would make the statistics more closely related to life. The clerk must know that a certain method of procedure is to be followed, whereas the statistical scientist must know *why* it is to be followed, and especially what social good is to be achieved. In passing, it may perhaps be remarked that failure to distinguish between these two types of knowledge in the selection of employees for important governmental statistical positions has resulted in some instances in keeping the governmental statistical output in certain important and dynamic fields practically unchanged over periods of thirty or forty years, and, as a consequence, the figures are of little practical use in illuminating current economic and social problems.

In the upper classes of the statistical services, the possession of the knowledge needed in the position is included in the entrance qualifications. To a very considerable extent such a requirement gives to the employee already in a bureau or an office an advantage over his competitors who would seek to transfer to that bureau or office from an office dealing with a different subject matter or procedure, and thus it possibly results in some narrowing of the opportunities for advancement, especially for employees in offices that are dealing with a subject that is peculiar to that individual office. If an employee wishes to change his line of work, he may find that it is necessary to accept a position in the office in which he wishes to serve lower in class than the position he has been filling in the old establishment.

Some difference of opinion exists as to the seriousness of this interference with free competition without reference to organization units or lines. My own experience has been that the value of a statistical clerk frequently turns quite as much on his grasp of the subject he is working with and on his knowledge of the office and its procedure as it does on his possession of those qualities common to all statistical clerks. The popular tendency in the past generally has been seriously to under-rate the amount of peculiar and specialized knowledge that a government clerk must possess to fill the higher clerical positions in the public service. The upper government clerks are in fact often specialists. The inclusion of knowledge of the subject and the procedure as a requisite qualification for the positions recognizes this fact. The resulting preference thereby given an employee of the office in competition

with those outside it, leaves room, moreover, for the deliberate development of the understudy system in management. My own judgment has been that these factors far outweigh any objection that comes from narrowing the competition for a vacancy by demanding knowledge of the subject.

The use of group classes to cover positions that involve like responsibilities and duties, but call for a knowledge of different subjects or procedures, is feasible only if the decision is reached not to differentiate in salary on the basis of the subject or procedure known, provided these factors call for approximately equivalent training, experience, and ability. Persons familiar with the government service as it exists today are aware that a decision not to differentiate on this basis represents a radical reform. In certain fields of statistical investigation and research, the government is a monopolistic employer. Nobody is competing with the government for men to conduct nation-wide censuses of population, nor is the competition keen for men trained in vital statistics or educational statistics. On the other hand, the government has had to meet serious competition for men trained in the field of commercial statistics. Partly because of this competition, partly because of the difference between lump sum and statutory rolls, and partly because of differences in the market when the positions were established, great inequalities in salaries have arisen, and a chief statistician in a field where the government is a monopolistic employer has had to rest content with a salary much less than that being paid to chief statisticians in competitive fields. As an almost inevitable consequence, the younger men who are in a position to change more easily are turning toward the better paid fields, and one can perhaps properly question where the government is to get its future broad-gauged men for its monopolistic positions, in spite of the fact that some of these offices afford an almost unique opportunity for public service.

The commission met this situation by a decision not to let the degree of outside competition or the size of outside salaries be the determining factor. It placed scientific and technical positions regarded as demanding men of equal training and experience on a like salary scale and would pay its vital statisticians salaries equal to those paid its commercial statisticians. In view of this decision group classes could be used.

Another significant feature of the classification of statistical scientists is that both research statisticians and administrative statisticians are placed in the same class. The qualifications for Senior statisticians, for example, contain the following alternative requirement: "successful experience in the organization and management of important statistical inquiries and investigations, including the determina-

tion of the scope of the inquiry, the content of tables, the methods of analysis, and the preparation of reports, or distinction achieved in independent research in the subject to be investigated, or in closely related subjects, as shown by writings and publications and reviews of them."

Conceivably, the time may come when the number of statisticians is so great that the government will be able to secure, for those important statistical undertakings which involve administration, persons who are at once both good administrators and research statisticians of distinction. For the present, the wiser course seemed to be not to establish classes for these super-men of the profession, but to give equal recognition to those who can qualify under either one of the two branches. At present, the large statistical projects of the government must be organized about the available men; and he who is strong on one side and weak on the other must be buttressed on his weak side by capable assistants. The important thing now is to prevent administrative statistical positions from being filled by persons who are not statisticians at all.

The titles of the different classes recommended by the commission, with the salaries it would pay, are given in the following table. The detailed specifications descriptive of the duties, qualifications, and lines of advancement extend from pages 815 to 831, inclusive, of the commission's report and are, therefore, too long for reproduction here.

The position of director of the census and the class of positions entitled Senior Statistician, it will be noted, carry three asterisks in place of a recommended salary. The three asterisks indicate that the rate of compensation shall be "recommended to Congress by the Civil Service Commission after consultation with the heads of departments or independent establishments concerned. The recommendation shall be based upon a full appraisal of the duties and responsibilities of the position and its relation to positions in similar classes; the rate of compensation in each such case to be determined by Congress."

The commission appreciated the fact that in these highest positions the man makes the job. Inferentially, the lowest salary for a Senior Statistician would be over \$5,040, since the general rule of the commission was to make the entrance salary higher than the maximum salary for the class below. The commission would perhaps have been willing to fix a minimum, but it was not ready to fix a maximum or to provide for automatic advancement for the highest classes.

The salaries for the statistical science service as a whole are like those recommended for corresponding classes in the other technical and scientific services such as the engineering service, the biological science

<i>Title</i>	<i>Annual Salary</i>					
Mechanical Tabulation:						
Assorting Machine Operator	\$1140	\$1200	\$1260	\$1320		
Tabulating Machine Operator	1200	1260	1320			
General Tabulating Machine Operator	1560	1620	1680			
Supervisor, Tabulating or Assorting Machine Section (Group)	1560	1620	1680			
Mechanical Tabulation Examiner (Group)	1440	1500	1560			
Supervisor, Mechanical Tabulation Examining Section (Group)	1800	1920	2040	2160		
Principal Mechanical Tabulator	1980	2100	2220	2340		
Chief Mechanical Tabulator	2400	2520	2640	2760		
Card Punch Operator	1200	1260	1320			
Supervisor, Card Punching Section (Group)	1560	1620	1680			
Special Card Punch Operator	1320	1380	1440			
Supervisor, Special Card Punching Section (Group)	1620	1680	1740	1800		
Mechanical Tabulation Coder	1200	1260	1320			
Special Mechanical Tabulation Coder	1320	1380	1440			
Supervisor, Mechanical Tabulation Coding Section (Group)	1560	1620	1680			
Junior Mechanical Tabulation File Clerk	1140	1200	1260			
Supervisor, Mechanical Tabulation File Section	1560	1620	1680			
Special Mechanical Tabulation File Clerk	1320	1380	1440			
Supervisor, Special Mechanical Tabulation File Section	1560	1620	1680			
Statistical Clerical Work:						
Under Statistical Clerk	1260	1320	1380			
Junior Statistical Clerk	1440	1500	1560			
Senior Statistical Clerk (Group)	1620	1680	1740	1800		
Principal Statistical Clerk (Group)	1980	2100	2220	2340		
Head Statistical Clerk (Group)	2400	2520	2640	2760		
Chief Statistical Clerk (Group)	2820	2940	3060			
Statistical Science:						
Junior Statistician	1800	1920	2040	2160		
Assistant Statistician	2400	2520	2640	2760	2880	3000
Associate Statistician	3240	3360	3480	3600	3720	3840
Statistician (Group)	4140	4320	4500	4680	4850	5040
Senior Statistician (Group)	*	*	*			
Director of the Census	*	*	*			

service, the physical science, the economic and political science services, and the social science service.

In general, the salaries for the lowest classes of statistical clerks and employees engaged in mechanical tabulation are apparently higher than those paid by private enterprises. In the classes immediately above, with salaries ranging roughly from \$1,500 to \$1,800, the difference between the government service and private enterprises in eastern cities is apparently not very great. In the higher classes of statistical clerks and mechanical tabulators, where long experience, knowledge of the subject, and administrative ability are required, the salaries suggested by the commission are considerably lower than those paid commercially.

The salaries for statisticians are more nearly comparable with those paid university professors than with those paid statisticians in the commercial field. In this connection it should be remembered that the government statistician does not work an academic year and that he is

frequently barred from accepting any retainers for special services, and thus cannot add to his income as does a college professor. His writings, moreover, are generally the property of the government and he derives no income from them. In his writings, too, he is restricted by his official position, and although government statisticians and economists frequently are in possession of information which would be of intense popular interest, they not only cannot sell it, but they cannot even make it public. The salaries recommended by the commission, therefore, although representing a material increase over those now being paid, would not put the government statistician on a financial plane of equality with the best paid university professor. The amount of increase, moreover, fails in many cases to offset the increase in the cost of living that has taken place since the positions were filled by the present incumbents, and thus if the salaries are advanced as the commission recommends, the officials will not in fact be as well off as they were when appointed.

The failure to offset the increase in the cost of living is particularly noteworthy in the case of the clerical employees. Prior to the war the popular impression that the government clerks occupying non-administrative positions were generously paid, as compared with those in private enterprises, was undoubtedly correct. The increase in the cost of living has removed this difference, and the recommendations of the commission will not restore it except in the case of the lowest classes of clerical employees. The older government clerks in Washington who were appointed, say prior to 1913, will not find the purchasing power of their salaries fully restored by the recommendations of the commission.

The lowest classes of clerical employees in the government service must necessarily be well paid, as compared with those in private enterprise, as long as Congress maintains the "apportionment" provision of the Civil Service Act. This provision requires that positions in the departmental service at Washington shall be apportioned among the states in accordance with their population. The District of Columbia and the nearby states of Maryland and Virginia have, of course, greatly exceeded their quota, and under normal circumstances a person from one of these states cannot be permanently appointed to an ordinary clerkship. Certain banks and other large corporations have a fixed policy of giving preference to young men, and more especially to young women, who live at home. The government has indirectly adopted a policy exactly the reverse, and almost all its clerical employees must be residing away from their homes. Washington is a city of boarding houses, small apartments, and recently of dormitories. The employee must, therefore, be paid a salary which will permit the maintenance of

this individual status. The government cannot take advantage of the well recognized possibility of securing the lower classes of clerical employees at less than the cost of maintaining a person in the individual status by employing girls and boys who are living with their parents.

The rates recommended by the commission can, of course, be defended on the common argument used to support a minimum wage, but in this case no such defense is necessary, for the government could not attract the kind of people that it requires for its clerkships if it did not pay them enough to maintain themselves in Washington.

These matters that have been discussed are among the more important ones that were before the commission with relation to the statistical employees. In its letter of submittal to Congress the following sentence appears: "The task assigned to your commission by the Congress was the largest of its kind ever undertaken, and your commission is not suffering from any illusions as to the degree of perfection attained." It carried its work to the point which permitted it to lay before Congress a comprehensive plan, sufficiently worked out to warrant the passage of the necessary basic legislation to institute a radical and much needed reform in the government's methods of dealing with its employees. Perfection of detail will have to be secured as the organization develops. With all its possible imperfections of minutiae, the report represents the most important step in advance for the United States Civil Service since the Civil Service Act of 1883.